

TOTAL RECLAIM, INC.
Seattle, Washington
TSCA /PCB INSPECTION

Facility: Total Reclaim, Inc.
4400 4th Avenue South
Seattle, Washington 98134
(206) 343-1247

Contact: Amy Fuller, Environmental Coordinator

Inspection Date: November 25, 1998

Report Date: November 25, 1998

Inspector: Eileen Hileman
Investigations and Engineering Unit
Office of Environmental Assessment
EPA Region 10

RECEIVED
DEC 10 1998
"SWAT Unit"
"OWCM"

BACKGROUND

There is no inspection file on this facility in the Toxic Substances Program file system. This facility is a commercial storer of PCBs. Total Reclaim, Inc., is the largest appliance decommissioning facility in the Northwest according to their company spokesperson. The facility recycles domestic and commercial refrigerators and freezers; air conditioners, water coolers and dehumidifiers; stoves, microwave ovens and dishwashers; furnaces and heat pumps; and vending machines. As part of the recycling process the facility removes chlorofluorocarbon (CFC) refrigerants; PCBs from capacitors and ballasts; mercury switches and thermostats; chlorinated compressor oil; sulfur dioxide and ammonia refrigerants. Total Reclaim, Inc. is under contract to numerous municipal and county solid waste utilities to provide decommissioning of discarded appliances collected at transfer stations and during special cleanup events.

ENTRY/INTRODUCTION

On November 25, 1998, at 9:50 a.m. I presented my credentials to Amy Fuller, Environmental Coordinator and explained my intention to conduct a TSCA/PCB inspection. Ms. Fuller signed the TSCA Notice of Inspection and TSCA Confidentiality Notice, and retained a copy for her records. I also provided Ms. Fuller with a TSCA Request for Information from PCB Commercial Storer and requested the information/documentation be transmitted to EPA within 7 working days. The TSCA Request for Information from PCB Commercial Storer, Notice of Inspection and Confidentiality Notice are appended to the inspection report as Attachment I.



PRE-INSPECTION CONFERENCE & RECORDS REVIEW

Ms. Fuller explained that the original permit was issued to Total Reclaim, Inc. in 1997 and at that time, a company subsidiary called EcoLights handled the PCBs. However, Total Reclaim, Inc., made the decision in March 1998 to make EcoLights a separate company that is housed and operated in the same building as Total Reclaim, Inc.. According to Ms. Fuller, Total Reclaim Inc., now handles very little PCBs. Any PCBs are sent directly to EcoLights for processing for disposal. Ms. Fuller stated that she had contacted Dan Duncan, EPA Region 10 TSCA Program Director and EPA Headquarters orally and in writing regarding the change in the Total Reclaim, Inc. status and the creation of EcoLights as a separate company but EPA had not yet responded to the request to transfer the permit from Total Reclaim, Inc. to EcoLights. Ms. Fuller provided me with a brochure that explained the services provided by Total Reclaim, Inc. The brochure is appended to the inspection report as Attachment II.

FIELD INSPECTION

All power to the facility is supplied by Seattle City Light. Total Reclaim, Inc. does not own or store any PCB transformers or PCB capacitors other than those small PCB capacitors removed during the decommissioning process. Total Reclaim, Inc. is under contract with numerous municipal and county solid waste utilities to provide decommissioning of discarded appliances collected at transfer stations and during special cleanup events. Total Reclaim, Inc. accepts bulky articles such as refrigerators, freezers, air conditioners, stoves, furnaces, heat pumps, etc. and provides decommissioning utilizing dedicated refrigerant recovery equipment for different refrigerant gases. Ms. Fuller stated that no PCB spills have occurred at the facility. Waste oils that are removed during the decommissioning process are stored at the facility. According to Ms. Fuller the oil is not regularly tested for PCBs. Ms. Fuller stated the facility originally tested the oil for PCBs but no longer tested on a regular basis because no PCBs are contained in the types of oil being removed during the decommissioning process. The waste oil is stored at the facility in a 500 gallon tank. The waste oil is picked up by a recycler called SolPro. I requested that Ms. Fuller include a copy of the last waste manifest for the oil when the requested documents were mailed to my office. The waste oil tank is labeled as "oil". Ms. Fuller stated that because the waste oil is added to the tank in small increments (ounces), the facility does not keep in-out records for the waste oil tank.

The storage for disposal area for this facility is adjacent to the office, inside the decommissioning facility. The PCB storage for disposal area consisted of a fifty-five gallon drum inside a containment barrel (Photograph 1). The drum was marked with a PCB label. The drum is inside the decommissioning facility and therefore there is adequate roof and walls to prevent rain from reaching the drum. Various pieces of machinery and pieces of wood were in the area of the drum. Pieces of what appeared to be plywood were leaning against the drum/containment barrel. The entrances to the decommissioning area where the storage for disposal drum is kept are not marked with PCB labels. The drum was empty at the time of the inspection (Photograph 2). Ms. Fuller stated that she had been told by Washington Department of Ecology that this storage for disposal area could be considered a "satellite area" and therefore the drum is not marked with "start accumulation dates" until the drum is moved to the


EcoLights' PCB storage for disposal area. Ms. Fuller stated that Total Reclaim, Inc., normally processes very few PCB items. Ms. Fuller stated that if, during the decommissioning process, small PCB capacitors are found within the articles, they are moved very quickly from Total Reclaim's storage for disposal area to EcoLights' PCB storage for disposal area. I asked Ms. Fuller how long PCB items might remain in Total Reclaim, Inc.'s PCB storage for disposal drum prior to being moved to the EcoLights PCB storage for disposal area. Ms. Fuller stated that the longest period of time items might remain in the drum in this storage for disposal area prior to being moved to EcoLights is three to four months.

I thanked Ms. Fuller for her time and began the inspection of the EcoLights facility.

ATTACHMENTS

1. TSCA Request for Information from PCB Commercial Storer, Notice of Inspection, TSCA Confidentiality Notice
2. Total Reclaim, Inc., brochure
3. Photographs
4. Documentation

November 25, 1998


Eileen Hileman



United States Environmental Protection Agency
Washington, D.C. 20460
Toxic Substances Control Act

Form Approved
OMB No. 2070-0007
Approval Expires 10-31-92

TSCA INSPECTION CONFIDENTIALITY NOTICE

The public reporting burden for this collection of information is estimated to average 5 minutes per response. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), US Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked ATTENTION: Desk Officer for EPA.

1. Investigation Identification			2. Firm Name
Date 11-24-98	Inspector No. 16131	Daily Seq. No. 001	Total Reclaim
3. Inspector Name M. Eileen Hileman			4. Firm Address 1431 S.W. Hanford 2400 24th Ave S Seattle, WA 98134
5. Inspector Address U.S. EPA R10 1200 Sixth Ave - Seattle, WA 98101			6. Chief Executive Officer Name Craig Lorch
			7. Title Sec/Treas

TO ASSERT A CONFIDENTIAL BUSINESS INFORMATION CLAIM

It is possible that EPA will receive public requests for release of the information obtained during inspection of the facility above. Such requests will be handled by EPA in accordance with provisions of the Freedom of Information Act (FOIA), 5 USC 552; EPA regulations issued thereunder, 40 CFR Part 2; and the Toxic Substances Control Act (TSCA), Section 14. EPA is required to make inspection data available in response to FOIA requests unless the Administrator of the Agency determines that the data contain information entitled to confidential treatment or may be withheld from release under other exceptions of FOIA.

Any or all the information collected by EPA during the inspection may be claimed confidential if it relates to trade secrets or commercial or financial matters that you consider to be confidential business information. If you assert a CBI claim, EPA will disclose the information only to the extent, and by means of the procedures set forth in the regulations (cited above) governing EPA's treatment of confidential business information. Among other things, the regulations require that EPA notify you in advance of publicly disclosing any information you have claimed as confidential business information.

A confidential business information (CBI) claim may be asserted at any time. You may assert a CBI claim prior to, during, or after the information is collected. The declaration form was developed by the Agency to assist you in asserting a CBI claim. If it is more convenient for you to assert a CBI claim on your own stationery or by marking the individual documents or samples "TSCA confidential business information," it is not necessary for you to use this form. The inspector will be glad to answer any questions you may have regarding the Agency's CBI procedures.

While you may claim any collected information or sample as confidential business information, such claims are unlikely to be upheld if they are challenged unless the information meets the following criteria:

1. Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

2. The information is not, and has not been, reasonably obtainable without your company's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on showing of special need in a judicial or quasi-judicial proceeding).
3. The information is not publicly available elsewhere.
4. Disclosure of the information would cause substantial harm to your company's competitive position.

At the completion of the inspection, you will be given a receipt for all documents, samples, and other materials collected. At that time, you may make claims that some or all of the information is confidential business information.

If you are not authorized by your company to assert a CBI claim, this notice will be sent by certified mail, along with the receipt for documents, samples, and other materials to the Chief Executive Officer of your firm within 2 days of this date. The Chief Executive Officer must return a statement specifying any information which should receive confidential treatment.

The statement from the Chief Executive Officer should be addressed to:

and mailed by registered, return-receipt requested mail within 7 calendar days of receipt of the Notice. Claims may be made any time after the inspection, but inspection data will not be entered into the special security system for TSCA confidential business information until an official confidentiality claim is made. The data will be handled under the agency's routine security system unless and until a claim is made.

TO BE COMPLETED BY FACILITY OFFICIAL RECEIVING THIS NOTICE:

I have received and read the notice.

If there is no one on the premises of the facility who is authorized to make business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the company's chief executive officer. If there is another company official who should also receive this information, please designate below.

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature 	Name
Name Amy Fuller	Title
Title Environmental Coordinator	Address
Date Signed 11/25/98	



United States Environmental Protection Agency
Washington, D.C. 20460
Toxic Substances Control Act

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I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature 	Name
Name Amy Fuller	Title
Title Environmental Coordinator	Address
Date Signed 11/25/98	



United States Environmental Protection Agency
Washington, D.C. 20460

Toxic Substances Control Act

NOTICE OF INSPECTION

Form Approved
OMB No. 2070-0007
Approval Expires 07-31-96

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1. Investigation Identification			2. Time	3. Firm Name
Date 11-24-98	Inspector No. 16131	Daily Seq. No. 001	9:50 AM	Total Reclaim
4. Inspector Address EPA Region 10 Investigations & Engineering 1200 Sixth Ave. Seattle, WA 98101			5. Firm Address 1131 SW Hanford Seattle, WA 4400 1st Ave. S. Seattle WA 98134	

REASON FOR INSPECTION

Under the authority of Section 11 of the Toxic Substances Control Act:

- ☒ For the purpose of inspecting (including taking samples, photographs, statements, and other inspection activities) an establishment, facility, or other premises in which chemical substances or mixtures or articles containing same are manufactured, processed or stored, or held before or after their distribution in commerce (including records, files, papers, processes, controls, and facilities) and any conveyance being used to transport chemical substances, mixtures, or articles containing same in connection with their distribution in commerce (including records, files, papers, processes, controls, and facilities) bearing on whether the requirements of the Act applicable to the chemical substances, mixtures, or articles within or associated with such premises or conveyance have been complied with.

☐ In addition, this inspection extends to (Check appropriate blocks):

☐ A. Financial data

☐ D. Personnel data

☐ B. Sales data

☐ E. Research data

☐ C. Pricing data

The nature and extent of inspection of such data specified in A through E above is as follows:

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Inspector Signature <i>M. Eileen Hileman</i>		Recipient Signature <i>Amy Fuller</i>	
Name M. Eileen Hileman		Name Amy Fuller	
Title Inspector	Date Signed 11-25-98	Title Environmental Coordinator	Date Signed 11/25/98



United States Environmental Protection Agency
Washington, D.C. 20460
Toxic Substances Control Act
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Date	Inspector No.	Daily Seq. No.		
11-24-98	16131	001	9:50 AM	Total Reclaim
4. Inspector Address			5. Firm Address	
EPA Region 10 Investigations & Engineering 1200 Sixth Ave. Seattle, WA 98101			1131 SW Hanford Seattle, WA 4400 1st Ave. S. Seattle WA 98134	

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Certification

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Inspector Signature		Recipient Signature	
<i>M. Eileen Hildeman</i>		<i>Amy Fuller</i>	
Name		Name	
M. Eileen Hildeman		Amy Fuller	
Title	Date Signed	Title	Date Signed
Inspector	11-25-98	Environmental Coordinator	11/25/98

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 10
REQUEST FOR INFORMATION: TOXIC SUBSTANCES CONTROL ACT
PCB COMMERCIAL STORER INSPECTION

FACILITY NAME	Total Reclaim
ADDRESS	4400 4th AVE S.
	Seattle, WA 98134
EPA ID NUMBER	WAH 000 003 582

INSPECTOR NAME	M. Eileen Hileman
INSPECTION DATE	11-25-98

- ① A copy of complete PCB Annual Documents (or Document Logs) for the years 1997.
2. A copy of all manifests for PCBs received from generators since 01-01-98
- ③ A copy of all manifests (or other tracking papers) for PCBs shipped to a commercial storer or disposal facility since 01-01-98
- ④ A copy of all Certificates of Disposal for PCBs received since 01-01-98
- ⑤ A copy of the monthly inspection records of all PCB Articles and PCB Containers in each storage area identified in the closure plan, pursuant to 40 C.F.R. § 761.65(c)(5), since 01-01-98.
6. A copy of batch records for any bulk tanks of PCBs since N/A.
7. A copy of all sales records (or other records of disposition) for waste oils containing detectable levels ≥ 2 ppm of PCBs, which were delivered to oil recyclers or other parties, since N/A.
8. All spill reports documenting PCB spill response and cleanup since N/A.

M. Eileen Hileman
INSPECTOR SIGNATURE

11-25-98
DATE

Mail to inspector within 7 working days from date of inspection

FOR MORE INFORMATION



Contact our office
at (206) 343-7443
or complete and
send this card to
receive information about
our services and how we can
best address your appliance
recycling needs.

Name _____

Title _____

Company
or Agency _____


Address _____

City _____ State _____ Zip _____

I am interested in receiving the following
information:

- ☐ Municipal Services
- ☐ HVAC Contractor Services
- ☐ Neighborhood Recycling Events
- ☐ Laboratory Testing of Refrigerants
- ☐ EPA Certified Refrigerant Reclaiming

The Clean Air Act of 1990

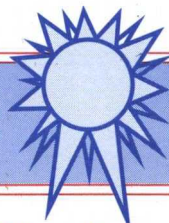


In response to the threat on the ozone
layer resulting from increased
releases of CFCs, Congress
passed the 1990 Amendments
to the Clean Air Act. The Act
states, in part:

*"Effective July 1, 1992, it shall be unlawful
for any person in the course of maintaining,
servicing, repairing, or disposing of any
appliance or industrial process refrigeration,
to knowingly release or dispose of any Class I
or Class II substance used as a refrigerant in such
appliance in a manner which permits such substance
to enter the environment."*

The Act dramatically changed the way
business is done in the refrigeration and
air conditioning industry. Gone are the
days when, for convenience sake, a
technician would vent CFC refrigerants
from a system to speed up repair time.

Technicians now receive hours of
training in refrigerant recovery and
proper management of refrigerants and
use several thousand dollars in new
equipment to recover refrigerant gases.
Finally, the recovered refrigerants are
filtered and reclaimed for reuse by
industry.



Using an EPA Clean Air Grant administered
by the Washington Department of Ecology,
Total Reclaim staff is completing a study
related to the proper management of used
refrigerant gases and safe, effective process-
ing of discarded appliances.

CLIENTS WE SERVICE

Appliance Dealers
Building Owners and Managers
City and County Solid Waste Utilities
Charitable Organizations
Commercial HVAC Contractors
Housing Authorities
Landfills
Neighborhood Clean-Up Events
Restaurant Supply Companies
Transfer Stations
General Public



TOTAL RECLAIM, INC.

P.O. Box 24996
Seattle, WA 98124-0996
(206) 343-7443

Fax
(206) 343-7445



Printed on recycled paper

Working to Keep the Ozone Whole



**TOTAL
RECLAIM INC.**
REFRIGERANT SERVICES

Total Reclaim Inc., is the largest appliance decommissioning facility in the Northwest.

Appliances We Recycle

- Domestic/commercial refrigerators and freezers
- Air conditioners, water coolers & dehumidifiers
- Stoves, microwave ovens and dishwashers
- Furnaces and heat pumps
- Vending machines

Hazardous Materials We Remove and Properly Manage

- Chlorofluorocarbon (CFC) refrigerants
- Polychlorinated Biphenyl (PCB) laden capacitors and ballasts
- Mercury switches and thermostats
- Highly chlorinated compressor oil
- Sulfur dioxide (SO₂) and ammonia (NH₃) refrigerants

Benefits of Appliance Recycling

- Reduces depletion of the Earth's ozone layer
- Keeps hazardous materials out of the waste stream
- Diverts substantial amounts of material conserving valuable landfill space
- Preserves valuable stocks of CFCs
- Produces high quality metals for recycling

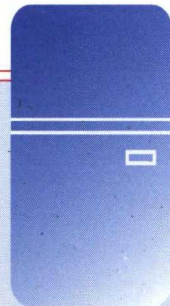


MUNICIPAL SERVICES

Total Reclaim is under contract with numerous municipal and county solid waste utilities to provide decommissioning of discarded appliances collected at transfer stations and during special clean-up events.

Total Reclaim works with all different types of refrigerant gases, including R-11, R-12, R-22, R-114, R-500, R-502, and the more exotic and hazardous gases, Sulfur Dioxide and Ammonia. We utilize dedicated refrigerant recovery equipment for different refrigerant gases to prevent cross-contamination and to ensure recovered gases may be reclaimed.

Total Reclaim provides manifested disposal of the hazardous materials contained in appliances, including: PCB capacitors, mercury switches, and highly chlorinated compressor oil, using permitted hazardous waste management companies.



NEIGHBORHOOD RECYCLING EVENTS

Over the past two summers, the Total Reclaim staff has worked 24 Saturdays, participating in Special Recycling Collection Events sponsored by the King County Solid Waste Division. This program is designed to enable county residents in rural and unincorporated areas to get rid of hard to recycle items, reducing illegal dumping, preventing improper disposal of hazardous materials, and preserving valuable landfill space.

HVAC CONTRACTOR SERVICES

Total Reclaim has developed a comprehensive compressor and air conditioning unit recycling program, including:

- On or off-site recovery of CFC gases in accordance with EPA regulations
- Transportation of complete units to Total Reclaim's facility for decommissioning
- Removal and manifesting of PCB containing capacitors for disposal as hazardous waste
- Draining compressors of lubricating oil and shipping of chlorinated oil to a permitted disposal facility
- Preparation of all metals for recycling using domestic and foreign scrap metal recyclers



In addition, Total Reclaim is the only EPA certified reclamation facility in Washington state. Total Reclaim can provide laboratory analysis of refrigerant gases and reclaiming to ARI 700-93 specifications.

TOTAL RECLAIM, INC.
P.O. Box 24996
Seattle, WA 98124-0996

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P.O. Box 24996
Seattle, WA 98124-0996

Photograph 1 at Total Reclaim, Inc., Seattle, Washington by Eileen Hileman on 11/25/98. The PCB storage for disposal area at Total Reclaim, Inc., consisted of a fifty-five gallon drum inside a containment barrel. Pieces of wood were stacked against the drum and containment barrel.



Photograph 2. Total Reclaim Inc., Seattle, Washington by Eileen Hileman on 11/25/98. The PCB storage for disposal drum was empty at the time of the inspection.



TOTAL RECLAIM INC.
REFRIGERANT SERVICES

Amy Fuller

P.O. Box 24996 • Seattle, WA 98124
(206) 343-7443 • (206) 343-7445 Fax
amyf@totalreclaim.com





TOTAL RECLAIM INC.

REFRIGERANT SERVICES

P.O. BOX 24996, SEATTLE, WA. 98124 (206) 343-7443

December 4, 1998

Eileen Hileman

Office of Environmental Assessment- Investigations and Engineering

1200 Sixth Avenue (OEA-095)

Seattle, WA 98101

Dear Ms. Hileman;

Enclosed you will find the requested documents for Total Reclaim, Inc. They include:

PCB Activity Report for the year 1997

List of capacitors shipped for 1998, including manifest

Weekly Hazardous Waste Inventory for PCB capacitors

Manifest from Sol-Pro Inc. for CFC-laden oils

You will notice that for the manifest included for the capacitors the generator is named as EcoLights Northwest. This is because we combined the one drum of capacitors with EcoLights Northwest's PCB waste for transportation purposes.

In your request, a copy of manifests for PCBs received from generators was requested. Total Reclaim does not accept PCB materials from outside sources so none have been included. All PCB capacitors generated at Total Reclaim are from the HVAC equipment we recycle.

If there are any further questions please feel free to contact me at 206-343-7443 or via email at amyf@totalreclaim.com.

Thank you for your consideration.

Sincerely,

Amy Fuller
Total Reclaim, Inc.



"Working to keep the ozone whole."

EcoLights Northwest Annual PCB Activity Report

Facility: Total Reclaim, Inc.
d.b.a. EcoLights Northwest
1131 SW Hanford
Seattle, WA 98134

E.P.A. I.D. #: WAD988516951

PCB Waste Received:

Manifest #	Type of Waste	Total Weight (kg)	Approx. PCB Weight(kg)
01319	PCB Ballast	66	15.2
01318	PCB Ballast	62	14.2
01016	PCB Ballast	49	11.1
01043	PCB Ballast	409	94.1
01623	PCB Ballast	15.4	3.5
05400	PCB Ballast	61.6	14.2
97210	PCB Ballast	1480.6	340.5
01161	PCB Ballast	70.4	16.2
01221	PCB Ballast	1562	359.3
01138	PCB Ballast	1100	253
01619	PCB Ballast	354.2	81.5
01169	PCB Ballast	550	126.5
06075	PCB Ballast	1782	409.9
06074	PCB Ballast	10,219	2350.4
05733	PCB Ballast	6.6	1.5
05893	PCB Ballast	4664	1072.7

PCB Waste Internal Generation:

n/a	PCB Capacitors	3584	3584
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PCB Waste Shipped for Disposal:

30022	Ballasts and Capacitors	26,035	8747.8
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PCB Year End Storage:

There was no PCB waste on site at the end of 1997.

Capasitors Shipped

Manifest #	000
Generator	TRI, internal generation, capacitors
Phone Number	
Lbs of Ballast	360
Delivery Date	
Barrel #	9
Ship out date	9/22/98
Final Destination	Full Circle, Manifest # 30391

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. 40 CFR Part 761		Manifest Document No. 30392		2. Page 1 of 1	
3. Generator's Name and Mailing Address Ecolights / Seattle 4400 4th Ave, So. / WA 98134							
4. Generator's Phone (206) 343-1247							
5. Transporter 1 Company Name ABF Freight Systems, Inc.		6. US EPA ID Number		A. State Transporter's ID			
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone (718) 599-9339			
				C. State Transporter's ID			
				D. Transporter 2 Phone			
9. Designated Facility Name and Site Address Full Circle, Inc. 509 Manida Street Bronx NY 10474		10. US EPA ID Number NYD986980233		E. State Facility's ID			
				F. Facility's Phone 718-328-4667			
11. WASTE DESCRIPTION				Containers		13. Total Quantity	
				No.	Type		
a. RQ, Polychlorinated Biphenyls, Mixture, 9 UN2315, PG II				5	DM	2,900 3,200 13	1b
b.							
c.							
d.							
F. Additional Descriptions for Materials Listed Above Used flourescent light ballasts containing small capacitors. Ballasts are being used for recycling.				G. Handling Codes for Wastes Listed Above (B) (R)			
15. Special Handling Instructions and Additional Information In Case of Emergency, Call Full Circle at (800) 775-1516. Drums 1 #2, #4, #5, #1, #3, 4 WO: 60024 / 00							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name Julie K Budlong				Signature <i>Julie K Budlong</i>		Date 09/22/98	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature <i>R J Justice</i>		Date 9/22/98	
Printed/Typed Name L. J. Justice				Signature		Date	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Date	
Printed/Typed Name				Signature		Date	
19. Discrepancy Indication Space							
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name				Signature		Date	
						Month Day Year	



HAZARDOUS WASTE INVENTORY - PCB CAPACITORS

THIS INVENTORY IS TO BE COMPLETED AT THE END OF EACH WEEK IN DETAIL.

WEEK OF	AMT. TOTAL	AMT. REC'D	AMT. SHIP'D	SHIP TO? WHEN?	ACTION REQ.	COMMENTS	INITIALS
3/14/87	?			was to be shipped to TX?	yes	Move to Tear Down	
4/1/88	1/2 Drum			OK	NO	yes NON PCB / NON HAZ WASTE Section	
4/15/88	3/4 Drum			OK			
4/29/88	3/4 Drum			OK	NO		LL
5/19/88	3/4 Drum			OK	NO		AF
5/26/88	3/4 + drum			almost full	NO		AF
6/15	"			nothing more	NO		AF
6/29	"			almost	NO		AF
7/7	"			almost - ^{area needs to be clear} - AF told	NO		AF
7/20	almost full			soon - call for quote	yes	will last 2-3 more weeks	AF
8/4	"			will ship w/ PCB's	NO		AF
8/17	Full			move to burn	yes		AF
9/1	Full!			Fireman was to move not alone - to ship this week	yes	Need to move! + replace	AF
PG. TOTALS							

NOTES:

HAZARDOUS WASTE INVENTORY - PCB CAPACITORS

THIS INVENTORY IS TO BE COMPLETED AT THE END OF EACH WEEK IN DETAIL.

WEEK OF	AMT. TOTAL	AMT. REC'D	AMT. SHIP'D	SHIP TO? WHEN?	ACTION REQ.	COMMENTS	INITIALS
9/14	0		1 Drum	brought to storage area	no		AF
9/21	very little		1 Drum	Full Circle, 9/21	no		AF
10/6	"		1 Drum		no		AF
10/19	"		0		no		AF
11/2	"	a few	0	toor	yes	- too much around drum. need to liberate space	AF
11/13	"	0	0		yes	"	AF
11/27	"	0	0		no	- area cleaned out	AF
12/4	"	0	0		yes	- area needs to be cleaned again	AF
PG. TOTALS							

NOTES:

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. WAH900000352		Manifest Document No. 253-627-4822		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address TOTAL RECLATH 4400 4TH AVE. SOUTH, SEATTLE, WA 98134						A. State Manifest Document Number							
						B. State Generator's ID							
4. Generator's Phone (206) 343-7443						C. State Transporter's ID							
5. Transporter 1 Company Name SOL PRO, INC.						D. Transporter's Phone 53-627-4822							
7. Transporter 2 Company Name						E. State Transporter's ID							
8. US EPA ID Number						F. Transporter's Phone							
9. Designated Facility Name and Site Address SOL-PRO, INC. 1825 ALEXANDER AVE. TACOMA, WA 98421						G. State Facility's ID							
10. US EPA ID Number WA0981769110						H. Facility's Phone 253-627-4822							
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
						No. Type							
a. HM HAZARDOUS WASTE LIQUID, N.O.S., 9, NA 1082, PG III, (MINERAL OIL, TETRACHLOROETHYLENE)						1		TT		700		F002, F003 F005, WT02 WP02	
b.													
c.													
d.													
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above							
11a. WPQ#10455, 1, B206, COMPRESSOR & REFRID OIL													
11a. RQ-100 / ERG 171													
15. Special Handling Instructions and Additional Information													
REPORT ANY "RQ" DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR CUST#10010/DP EMERGENCY CONTACT: ANY 206-343-7443													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name						Signature				Month Day Year			
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature				Month Day Year			
Printed/Typed Name						Signature				Month Day Year			
18. Transporter 2 Acknowledgement of Receipt of Materials						Signature				Month Day Year			
Printed/Typed Name						Signature				Month Day Year			
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.													
Printed/Typed Name						Signature				Month Day Year			



SOL-PRO, INC.
Land Disposal Restriction Form

PAGE 1 OF 4

SECTION 1: Generator Information

Generator Name: TOTAL RECLAIM Manifest: 97129
EPA ID #: WAD988516951 WPQ: 10455

SECTION 2: Material NOT Subject to Land Disposal Restrictions

☐ The material is NOT regulated by the EPA (RCRA)
☐ The material is regulated by the EPA, but is subject to a variance, extension or exemption to the effective date.

SECTION 3: Material Subject to Land Disposal Restriction (LDR)

NOTE: The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in Part 268, Subpart D or do not meet the applicable prohibition levels specified in 268.32 or RCRA Section 304(d). Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below. (check all spaces and boxes that apply). Sol-Pro, Inc. does not accept EPA regulated wastewater's, multisource leachate (F039) and dioxin containing materials (F020-F023 and F026-F028).

- ☒ The shipment contains F001 - F005 spent solvents : Complete "Treatment Standards for F001 - F005 spent solvents".
- ☐ The shipment includes RCRA Section 3004(d) California listed wastes : Complete "California List Constituents and their Prohibition Levels" section.
- ☐ The shipment includes D001 waste prohibited under 40 CFR 268.37 : Complete the "Ignitable Subcategory" section.
- ☐ The shipment includes Hazardous debris as defined in 40 CFR 268.2. : Complete the "Hazardous Debris contaminant Subject to Treatment".
- ☐ The shipment includes other Land Disposal Restricted materials: Identify below:

EPA Code	Constituent/ Subcategory	Treatment Technology Code (40 CFR 268.41)	Concentration Based Treatment Standard		Effective Date
			CCWE (40 CFR 268.41)	CCW (40 CFR 268.43)	

CALIFORNIA LISTED CONSTITUENTS AND THEIR PROHIBITION LEVELS:

(Instructions: Check the box of constituents likely to be present.)

WASTE CONSTITUENT

- ☐ Liquid with PCB's
- ☐ Liquid HW that contains HOC's in total concentrations
- ☐ Non-Liquid HW that contains HOC's in total concentrations
- ☐ Nickel (liquid waste)
- ☐ Thallium (liquid waste)
- ☐ Arsenic (liquid waste)
- ☐ Cadmium (liquid waste)
- ☐ Chromium VI (liquid waste)
- ☐ Lead (liquid waste)
- ☐ Mercury (liquid waste)
- ☐ Selenium (liquid waste)
- ☐ Free cyanides (liquid)
- ☐ Liquids with a pH \leq 2

CONCENTRATIONS

- \geq 50 ppm
- \geq 1000 mg/l
- \geq 1000 mg/kg
- \geq 134 ppm
- \geq 130 ppm
- \geq 500 ppm
- \geq 100 ppm
- \geq 500 ppm
- \geq 500 ppm
- \geq 20 ppm
- \geq 100 ppm
- \geq 1000 ppm

TREATMENT STANDARDS FOR F001 - F005 SPENT SOLVENTS

(Check the box besides each waste included in the off-site shipment; check or otherwise identify the individual constituents likely to be present in each waste.)

Hazardous Waste description	Constituents of Concern	Total mg/kg	TCLP mg/L
<input type="checkbox"/> F001 SPENT HALOGENATED SOLVENTS USED IN DEGREASING	Carbon tetrachloride	5.6	<input type="checkbox"/>
	Methylene Chloride	33	<input type="checkbox"/>
	Tetrachloroethylene	5.6	<input type="checkbox"/>
	1,1,1 - Trichloroethane	5.6	<input type="checkbox"/>
	Trichloroethylene	5.6	<input type="checkbox"/>
	1,1,2 - Trichloro - 1,2,2-trifluoroethane ¹	28	<input type="checkbox"/>
	Trichloromonofluoromethane	33	<input type="checkbox"/>
<input checked="" type="checkbox"/> F002 SPENT HALOGENATED SOLVENTS	Chlorobenzene	5.7	<input type="checkbox"/>
	o-Dichlorobenzene	6.2	<input type="checkbox"/>
	Methylene Chloride	33	<input checked="" type="checkbox"/>
	Tetrachloroethylene	5.6	<input checked="" type="checkbox"/>
	1,1,1 - Trichloroethane	5.6	<input type="checkbox"/>
	1,1,2 - Trichloroethane	7.6	<input type="checkbox"/>
	Trichloroethylene	5.6	<input type="checkbox"/>
	1,1,2 - Trichloro - 1,2,2 - trifluoroethane ¹	28	<input checked="" type="checkbox"/>
	Trichloromonofluoroethane	33	<input type="checkbox"/>
<input checked="" type="checkbox"/> F003 SPENT NON-HALOGENATED SOLVENTS	Acetone	160	<input checked="" type="checkbox"/>
	n-Butyl alcohol	2.6	<input type="checkbox"/>
	Cyclohexanone ²		0.75 <input type="checkbox"/>
	Ethyl acetate	33	<input type="checkbox"/>
	Ethyl benzene	6.0	<input checked="" type="checkbox"/>
	Ethyl ether	160	<input type="checkbox"/>
	Methanol ²		0.75 <input type="checkbox"/>
	Methyl isobutyl ketone	33	<input type="checkbox"/>
	Xylene (totals)	28	<input checked="" type="checkbox"/>
<input type="checkbox"/> F004 SPENT NON-HALOGENATED SOLVENTS	Cresol (m- and p-isomers)	3.2	<input type="checkbox"/>
	o-Cresol	5.6	<input type="checkbox"/>
	Nitrobenzene	14	<input type="checkbox"/>
<input checked="" type="checkbox"/> F005 SPENT NON-HALOGENATED SOLVENTS	Benzene	3.7	<input type="checkbox"/>
	Carbon disulfide ²		4.8 <input type="checkbox"/>
	2-Ethoxyethanol	INCIN	<input type="checkbox"/>
	Isobutyl alcohol	170	<input type="checkbox"/>
	Methyl ethyl ketone	36	<input type="checkbox"/>
	2-Nitropropane	INCIN	<input type="checkbox"/>
	Pyridine	16	<input type="checkbox"/>
	Toluene	28	<input checked="" type="checkbox"/>

¹ The constituent of concern given here is believed to be correct. Although the August 19, 1992 final rule identifies the constituent as 1,1,2-Trichloro-1,2,2-trifluoroethane, historically the constituent has always been identified as 1,1,2-Trichloro-1,2,2-trifluoroethane.

² The treatment standards for carbon disulfide, cyclohexanone and methanol non-waste waters are based on the TCLP and apply only to spent solvents containing only one, two, or all three of these constituents. If a waste contains any of these constituents along with any of the other constituents found in F001 - F005, then only the treatment standards for the other constituents apply (i.e., the standards for carbon disulfide, cyclohexanone and methanol do not apply with when other constituents are present).

HAZARDOUS DEBRIS

The definition of "Debris" and "hazardous debris" are in 40 CFR 268.2 Per 268.45, hazardous debris must be treated for each "contaminant subject to treatment" To determine these, look up the waste code in 268.40 and list the regulated hazardous constituents for each waste code. check the box that applies.

- ☐ This shipment contains hazardous debris that will be treated to comply with the alternative treatment standards of 268.45 (e.g., macroencapsulation or abrasive blasting).
- ☐ This shipment contains hazardous debris that will be treated to meet the 268.40 treatment standards for the waste(s) contaminating the debris.

The contaminants subject to the treatment for this debris are identified below:

<u>EPA Waste Code</u>	<u>Subcategory</u>	<u>Contaminants subject to treatment</u>
_____	_____	_____
_____	_____	_____

IGNITABLE WASTE SUBCATEGORY - NON-WASTE WATERS

(Instructions: Check the appropriate box that applies.)

- ☐ D001 Ignitable liquids, high TOC ($\geq 10\%$ TOC) FSUBS/RORGS/INCIN
- ☐ D001 Ignitable liquids, low TOC ($< 10\%$ TOC) DEACT

UNIVERSAL TREATMENT STANDARDS FOR ORGANICS HAZARDOUS CONSTITUENTS

- ☐ The underlying hazardous constituent in the characteristic waste as defined in 268.7(a)(1)(ii) and the individual constituent responsible for the (TC) organic waste designation (D018 - D043) as defined in 268.48 and the (UTS) 59 FR 47982. Indicate by checking the appropriate box below:

<input type="checkbox"/> Antimony	<input type="checkbox"/> Chromium	<input type="checkbox"/> Silver
<input type="checkbox"/> Arsenic	<input type="checkbox"/> Lead	<input type="checkbox"/> Thallium
<input type="checkbox"/> Barium	<input type="checkbox"/> Mercury	<input type="checkbox"/> Vanadium
<input type="checkbox"/> Beryllium	<input type="checkbox"/> Nickel	<input type="checkbox"/> Zinc
<input type="checkbox"/> Cadmium	<input type="checkbox"/> Selenium	
<input type="checkbox"/> Acenaphthene	<input type="checkbox"/> Benzo(k)fluorathene	<input type="checkbox"/> 2-Chloroethyl vinyl ether
<input type="checkbox"/> Acenaphthylene	<input type="checkbox"/> Benzo(g,h,i)phenylene	<input type="checkbox"/> Chloromethane (methyl chloride)
<input type="checkbox"/> Acetone	<input type="checkbox"/> Bis(2-chloroethoxy)methane	<input type="checkbox"/> 2-Chloroasphthalene
<input type="checkbox"/> Acetonitrile	<input type="checkbox"/> Bis(2-chlorethyl)ether	<input type="checkbox"/> 2-Chlorophenol
<input type="checkbox"/> Acetophenone	<input type="checkbox"/> Bis(2-chloroisopropyl)ether	<input type="checkbox"/> 3-Chloropropylene
<input type="checkbox"/> 2 - Acetylaminofluorene	<input type="checkbox"/> Bis(2-ethylhexyl)phthalate	<input type="checkbox"/> Chrysene
<input type="checkbox"/> Acrolein	<input type="checkbox"/> Bromodichloromethane	<input type="checkbox"/> o-Cresol
<input type="checkbox"/> Acrylamide	<input type="checkbox"/> Bromomethane(methyl bromide)	<input type="checkbox"/> m-Cresol
<input type="checkbox"/> Acrylonitrile	<input type="checkbox"/> 4-Bromophenyl phenyl ether	<input type="checkbox"/> p-Cresol
<input type="checkbox"/> Aldrin	<input type="checkbox"/> n-butyl alcohol	<input type="checkbox"/> Cyclohexanone
<input type="checkbox"/> 4-Aminobiphenyl	<input type="checkbox"/> Butyl benzyl phthalate	<input type="checkbox"/> o,p'-DDD
<input type="checkbox"/> Aniline	<input type="checkbox"/> 2-sec-Butyl-4,6-dinitrophenol	<input type="checkbox"/> p,p'-DDD
<input type="checkbox"/> Anthracene	<input type="checkbox"/> Carbon disulfide	<input type="checkbox"/> o,p'-DDE
<input type="checkbox"/> Aramite	<input type="checkbox"/> Carbon tetrachloride	<input type="checkbox"/> p,p'-DDE
<input type="checkbox"/> alpha - BHC	<input type="checkbox"/> Chlordane (alpha & gamma isomers)	<input type="checkbox"/> o,p'-DDT
<input type="checkbox"/> beta - BHC	<input type="checkbox"/> p-Chloroaniline	<input type="checkbox"/> p,p'-DDT
<input type="checkbox"/> delta - BHC	<input type="checkbox"/> Chlorobenzene	<input type="checkbox"/> Dibenz(a,h,)anthracene
<input type="checkbox"/> Benz(a)anthracene	<input type="checkbox"/> Chlorobenzilane	<input type="checkbox"/> Dibenzo(a,e,)pyrene
<input type="checkbox"/> Benzal chloride	<input type="checkbox"/> 2-Chloro-1,3-butadiene	<input type="checkbox"/> 1,2-dibromo-3-chloropropane
<input type="checkbox"/> Benzene	<input type="checkbox"/> Chlorodibromomethane	<input type="checkbox"/> 1,2-dibromoethane
<input type="checkbox"/> Benzo(a)pyrene	<input type="checkbox"/> Chloroethane	<input type="checkbox"/> Dibromomethane
<input type="checkbox"/> Benzo(b)fluorathene	<input type="checkbox"/> Chloroform	<input type="checkbox"/> m-Dichlorobenzene
	<input type="checkbox"/> p-Chloro-m-cresol	<input type="checkbox"/> o-Dichlorobenzene

- | | | |
|---|---|--|
| <input type="checkbox"/> <i>p</i> -Dichlorobenzene | <input type="checkbox"/> Fluorene | <input type="checkbox"/> Parathion |
| <input type="checkbox"/> Dichlorodifluoromethane | <input type="checkbox"/> Heptachlor | <input type="checkbox"/> PCB's (total) |
| <input type="checkbox"/> 1,1-Dichloroethane | <input type="checkbox"/> Heptachlor epoxide | <input type="checkbox"/> Pentachlorobenzene |
| <input type="checkbox"/> 1,2-Dichloroethane | <input type="checkbox"/> Hexachlorobenzene | <input type="checkbox"/> Pentachlorodibenzo- <i>p</i> -dioxins |
| <input type="checkbox"/> 1,1-Dichloroethylene | <input type="checkbox"/> Hexachlorobutadiene | <input type="checkbox"/> Pentachlorodibenzofurans |
| <input type="checkbox"/> <i>trans</i> -1,2-Dichloroethylene | <input type="checkbox"/> Hexachlorocyclopentadiene | <input type="checkbox"/> Pentachloroethane |
| <input type="checkbox"/> 2,4-Dichlorophenol | <input type="checkbox"/> Hexachlorodibenzo- <i>p</i> -dioxins | <input type="checkbox"/> Pentachloronitrobenzene |
| <input type="checkbox"/> 2,6-Dichlorophenol | <input type="checkbox"/> Hexachlorodibenzofurans | <input type="checkbox"/> Pentachlorophenol |
| <input type="checkbox"/> 2,4-Dichlorophenoxyacetic acid (2,4-D) | <input type="checkbox"/> Hexachloroethane | <input type="checkbox"/> Phenacetin |
| <input type="checkbox"/> 1,2-dichloropropane | <input type="checkbox"/> Hexachloropropylene | <input type="checkbox"/> Phenanthrene |
| <input type="checkbox"/> <i>cis</i> -1,3-Dichloropropylene | <input type="checkbox"/> Indeno(1,2,3- <i>c,d</i>)pyrene | <input type="checkbox"/> Phenol |
| <input type="checkbox"/> <i>trans</i> -1,3-Dichloropropylene | <input type="checkbox"/> Iodomethane | <input type="checkbox"/> Phorate |
| <input type="checkbox"/> Dieldrin | <input type="checkbox"/> Isobutyl alcohol | <input type="checkbox"/> Phthalic acid |
| <input type="checkbox"/> Diethyl phthalate | <input type="checkbox"/> Isodrin | <input type="checkbox"/> Phthalic anhydride |
| <input type="checkbox"/> Di- <i>n</i> -butyl phthalate | <input type="checkbox"/> Isosafrole | <input type="checkbox"/> Pronamide |
| <input type="checkbox"/> <i>p</i> -Dimethylaminoazaobenzene | <input type="checkbox"/> Kepone | <input type="checkbox"/> Propanenitrile (ethyl cyanide) |
| <input type="checkbox"/> 2,4-Dimethyl phenol | <input type="checkbox"/> Methacrylonitrile | <input type="checkbox"/> Pyrene |
| <input type="checkbox"/> Dimethyl phthalate | <input type="checkbox"/> Methanol | <input type="checkbox"/> Pyridine |
| <input type="checkbox"/> Di- <i>n</i> -butyl phthalate | <input type="checkbox"/> Methylpyriline | <input type="checkbox"/> Safrole |
| <input type="checkbox"/> 1,4-Dinitrobenzene | <input type="checkbox"/> Methaxychlor | <input type="checkbox"/> Silvex (2,4,5-TP) |
| <input type="checkbox"/> 4,6-Dinitro- <i>o</i> -cresol | <input type="checkbox"/> 3-Methylcholathrene | <input type="checkbox"/> 1,2,4,5-Tetrachlorobenzene |
| <input type="checkbox"/> 2,4-Dinitrophenol | <input type="checkbox"/> 4,4-Methylene-bis(2-chloroaniline) | <input type="checkbox"/> Tetrachlorodibenzo- <i>p</i> -dioxins |
| <input type="checkbox"/> 2,4-Dinitrotoluene | <input type="checkbox"/> Methylene Chloride | <input type="checkbox"/> Tetrachlorodibenzofurans |
| <input type="checkbox"/> 2,6-Dinitrotoluene | <input type="checkbox"/> Methyl ethyl Ketone | <input type="checkbox"/> 1,1,1,2-Tetrachloroethane |
| <input type="checkbox"/> Di- <i>n</i> -octyl phthalate | <input type="checkbox"/> Methyl isobutyl Ketone | <input type="checkbox"/> 1,1,2,2-Tetrachloroethane |
| <input type="checkbox"/> Di- <i>n</i> -propylnitrosamine | <input type="checkbox"/> Methyl methacrylate | <input type="checkbox"/> Tetrachloroethylene |
| <input type="checkbox"/> 1,4-Dioxane | <input type="checkbox"/> Methyl methansulfonate | <input type="checkbox"/> 2,3,4,6-Tetrachlorophenol |
| <input type="checkbox"/> Diphenylamine | <input type="checkbox"/> Methyl parathion | <input type="checkbox"/> Toluene |
| <input type="checkbox"/> Diphenylnitrosamine | <input type="checkbox"/> Naphthalene | <input type="checkbox"/> Toxaphene |
| <input type="checkbox"/> 1,2-Diphenyl hydrazine | <input type="checkbox"/> 2-Naphthylamine | <input type="checkbox"/> Tribromomethane (bromoform) |
| <input type="checkbox"/> Disulfoton | <input type="checkbox"/> <i>o</i> -Nitroaniline | <input type="checkbox"/> 1,2,4-Trichlorobenzene |
| <input type="checkbox"/> Endrsulfan I | <input type="checkbox"/> <i>p</i> -Nitroaniline | <input type="checkbox"/> 1,1,1-Trichloroethane |
| <input type="checkbox"/> Endosulfan II | <input type="checkbox"/> Nitrobenzene | <input type="checkbox"/> 1,1,2-Trichloroethane |
| <input type="checkbox"/> Endosulfan sulfate | <input type="checkbox"/> 5-Nitro- <i>o</i> -toluidine | <input type="checkbox"/> Trichloroethylene |
| <input type="checkbox"/> Endrin | <input type="checkbox"/> <i>o</i> -Nitrophenol | <input type="checkbox"/> Trichloromonofluoromethane |
| <input type="checkbox"/> Endrin aldehyde | <input type="checkbox"/> <i>p</i> -Nitrophenol | <input type="checkbox"/> 2,4,5-Trichlorophenol |
| <input type="checkbox"/> Ethyl acetate | <input type="checkbox"/> N-Nitrosodiethylamine | <input type="checkbox"/> 2,4,6-Trichlorophenol |
| <input type="checkbox"/> Ethyl benzene | <input type="checkbox"/> N-Nitrosodimethylamine | <input type="checkbox"/> 2,4,5-Trichlorophenoxyacetic |
| <input type="checkbox"/> Ethyl ether | <input type="checkbox"/> N-Nitrosodi- <i>n</i> -butylamine | <input type="checkbox"/> 1,2,3-Trichloropropane |
| <input type="checkbox"/> Ethyl methylacrylate | <input type="checkbox"/> N-Nitrosomethylethylamine | <input type="checkbox"/> 1,1,2-Trichloro-1,2,2-trifluoroethane |
| <input type="checkbox"/> Ethylene oxide | <input type="checkbox"/> N-Nitrosomorpholine | <input type="checkbox"/> Tris(2,3-dibromopropyl)phosphate |
| <input type="checkbox"/> Famphur | <input type="checkbox"/> N-Nitrosopiperidine | <input type="checkbox"/> Vinyl chloride |
| <input type="checkbox"/> Fluoanthene | <input type="checkbox"/> N-Nitrosopyrrolidine | <input type="checkbox"/> Xylenes (total) |

CERTIFICATION AS REQUIRED BY 40 CFR 268.

The following certification is made for these restricted wastes (check the appropriate certification(s) that apply and sign and date).

☐ I have reviewed the UTS list of 268.48, and per 268.7(a), I have determined that there are no underlying hazardous constituents reasonably expected to be present in this waste.

☐ I have reviewed the UST list of 268.48, and per 268.7(a), I have determined that underlying hazardous constituents are present in this waste. The underlying hazardous constituents are identified on pages 3 & 4 of this LDR form.

☒ Certification for Materials NOT meeting Land Disposal Treatment Standards:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Printed Name

Signature

Date



TOTAL RECLAIM INC.

REFRIGERANT SERVICES
P.O. BOX 24996, SEATTLE, WA. 98124 (206) 343-7443

October 20, 2000

Daniel Duncan
USEPA Region 10
Mail Stop WCM-128
1200 Sixth Avenue
Seattle, WA 98101

RECEIVED

OCT 23 2000

OFFICE OF WASTE
& CHEM. MGMT.

Re: PCB Commercial Storage Closure Plan

Dear Mr. Duncan;

Enclosed you will find a copy of EcoLights Northwest's Closure Plan. Changes have been made to the plan pursuant to your review and letter dated August 16, 2000.

Due to growing demand for our services EcoLights Northwest has recently decided to move our facility to another location in south Seattle. This new location at 8th Ave. South is the one we are currently requesting approval for. All necessary changes have been made in the document, along with the proper supporting information.

We have also decided to increase our storage capacity for this new facility. We are requesting that the new facility be permitted to accept a total of 40 drums of PCB materials, as compared with 20 drums in our previous Plan.

Pursuant to the EPA's review we have decided to change some of the storage and closure procedures from the original Plan. We have changed the decontamination detergent and replaced it with diesel. We have also changed the polyester membrane berm and opted to use nonporous steel berms instead. These changes have been made to be more in-line with EPA's suggested storage and closure procedures. The Plan has been amended to reflect these changes.

All of the issues raised in your review have been addressed with two exceptions. The first question on page 2 states that our statement certifying compliance does not conform to the precise working as specified in 40 CFR 761.3. After a discussion with Dave Hanneman, of EPA headquarters, we were unable to determine the exact problem and which certification statement needs to be changed, thus this issue was not addressed.

In addition, the first question on page 3 pertaining to the regulatory citation of the closure plan was unclear. After a discussion with Dave Hanneman we were unable to determine why the certification would need to be changed. The one cited in the review, CFR Part



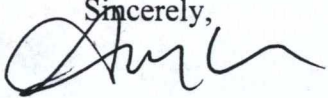
"Working to keep the ozone whole."

761.65 (e)(8) refers to Closure, whereas this section of the plan is for Pre-Cleanup Sampling.

I have enclosed the necessary updated addendum pages. I have not enclosed addendums which are already in your possession, such as the FEMA map. Both our current facility and new facility are represented on the same FRMA map. I have also not included another copy of the Insurance document as it is unchanged from our previous Plan submittal.

Thank you for your help with this process. If you have any further questions please feel free to contact me at 206-343-1247 or via email at amyf@totalreclaim.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Amy', with a stylized flourish extending to the right.

Amy Fuller
EcoLights Northwest, LLC

cc: David Hanneman, EPA Headquarters

EcoLights Northwest LLC Closure Plan

INTRODUCTION

EcoLights Northwest, LLC is a recycler of mercury bearing lights including fluorescent and high intensity discharge lamps. EcoLights Northwest collects and stores suspected PCB bearing lighting ballasts, electrical capacitors, and electrical transformers for shipment to a permitted PCB materials recycling and disposal facility.

The intent of this closure plan is to identify the appropriate steps to properly close EcoLights Northwest's facility at a future date in compliance with all state and federal regulations for the handling of PCB wastes.

SITE INFORMATION

Facility Name:	EcoLights Northwest, LLC
Owner/Operator:	EcoLights Northwest, LLC
Parent Firm Name:	Total Reclaim Inc. 4400 4 th Ave. South Seattle, WA 98134
Other Affiliates:	None
Facility Address:	9411 8 th Ave. South, Suite 3 Seattle, WA 98108
Mailing Address:	PO Box 94291 Seattle, WA 98124
Facility Owner:	KTR Associates, LLC 700 5 th Ave., Suite 27550 Seattle, WA 98104
Contact:	Craig Lorch, Owner, General Manager Amy Fuller, Environmental Compliance Manager
Telephone:	206-343-1247
Fax:	206-343-7445
EPA I.D. Number:	WAH 000 012 443
RCRA permit:	None
PCB Storage Notification:	June, 2000

QUALIFICATIONS

Introduction

EcoLights Northwest is a subsidiary of Total Reclaim, Inc. Total Reclaim has been in business since 1991 and is an industry leader in the decommissioning and recycling of CFC-bearing HVAC and refrigeration equipment, working for numerous municipalities and private industry. Total Reclaim assists customers in complying with the requirements of the Clean Air Act of 1990, all federal regulations, and the Washington State Dangerous Waste Regulations. This work includes tracking of all CFC refrigerants recovered and reclaimed by Total Reclaim and reporting these quantities to the EPA on a yearly basis. In addition, all customer CFC refrigerants are tracked and reported to the individual customer yearly.

The facility located at 9411 8th Ave. South has two functions. The first is to hold the lamp recycling processing and material storage facility for EcoLights Northwest, LLC. The second is as Total Reclaim Inc.'s CRT (Cathode Ray Tube) processing facility. (see facility diagram in Addendum)

EcoLights Northwest specializes in the recycling of lighting waste. EcoLights handles all types of lighting waste, including straight, round and HID fluorescent light bulbs, in addition to PCB and non-PCB light ballasts. EcoLights equipment can separate lamps into the constituent glass, aluminum, and mercury phosphor powder, making each available for recycling and reuse. EcoLights light ballast recycling efforts include segregating PCB ballasts from non-PCB ballasts. The PCB ballasts are then stored in 55 gallon drums and sent to a PCB vendor for metals separation, metals recycling, and PCB incineration. No PCB's sent to either EcoLights Northwest or Total Reclaim are ever landfilled.

Total Reclaim's newest venture is in the recycling of CRT monitors. Many materials in CRT monitors can be recovered and reused. Total Reclaim's process separates CRT's into their component parts, making the plastic, metals, and leaded glass available to recyclers both locally and nationally. Per Washington State regulations (WAC 173-303-017(2)(a)(ii)) the leaded glass is not regulated as a dangerous or hazardous waste since the material will be sent to a secondary recycler and no further processing will occur at the Total Reclaim facility.

Key Employee Qualifications

Craig Lorch, General Manager - EcoLights Northwest, LLC

Mr. Lorch is part owner of Total Reclaim Inc. and EcoLights Northwest, LLC. He manages EcoLights Northwest's daily operations and Total Reclaim's governmental affairs. Mr. Lorch is responsible for all technical operations of the EcoLights facility. He has over twelve years experience in the environmental industry, having worked with the King County Department of Solid Waste, Recycling and Waste Reduction Division before beginning Total Reclaim Inc. Mr. Lorch holds a B.S. in Mechanical Engineering from the University of Michigan and a M.S. in Public Administration from the University of Washington.

Jeff Zirkle, General Manager - Total Reclaim, Inc

Mr. Zirkle is part owner of Total Reclaim Inc. and EcoLights Northwest, LLC. He has over sixteen years of sales and marketing experience in the refrigeration and recycling industries. Mr. Zirkle manages Total Reclaim's daily operations and all sales activities. Prior to Total Reclaim, Mr. Zirkle worked with Johnson Controls, Pacific Air Control, and Roberts Trane as a sales engineer.

Amy Fuller, Environmental Compliance Manager - Total Reclaim and EcoLights NW

Ms. Fuller has worked with Total Reclaim Inc. and EcoLights Northwest for the past 7 years in the environmental compliance arena. She has completed the 40 hr. Hazardous Waste Regulatory Compliance Course and the 8 hr. Washington State Hazardous Waste Generator Course. Ms. Fuller holds a B.S. in Environmental Policy and Assessment from Western Washington University and is currently working on her M.B.A. from Seattle University.

Craig Lorch and Jeff Zirkle began Total Reclaim Inc. in 1991 without any outside affiliate representation, nor are either currently affiliated with any other waste or environmental company.

Environmental Violations

Total Reclaim Inc. has never been cited for Federal, State, or Local environmental violations since incorporation. Total Reclaim has never had a reportable spill.

EcoLights Northwest LLC has never been cited for Federal, State, or Local environmental violations since incorporation. EcoLights NW has never had a reportable spill.

In addition, no owner or key-employee have any past Local, State, or Federal waste-related violations resulting in a civil penalty or conviction nor is any key employee affiliated with any other waste handling facility.

FACILITY DESIGN QUALIFICATIONS AND DESCRIPTION

Certification Statement of Design Qualifications

Under the civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified sections of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Site Location and Boundaries

EcoLights Northwest is located at 9411 8th Ave. South, Suite 3 in Seattle, King County, Washington. The surrounding properties are large in size, over 20,000 ft.², light and medium

industrial facilities. There are a small number of residential properties within one mile of the site.

The building is bordered by 8th Ave. South to the east, by light industrial business in the contiguous building to the south, and paved parking lots to the north and west. Both parking lots are under EcoLights Northwest, LLC control.

Surround properties include an industrial painting facility across 8th Ave. to the east, an electroplating facility to the south, an industrial building under construction to the west, and a truck and trailer parking lot to the north.

One storm drain is located in the EcoLights Northwest's parking lot. It is equipped with a debris collection berm and a bag of oil absorbent material. The absorbent materials are changed monthly, regardless of condition. In the case of a spill the absorbent materials would be changed immediately. The parking lot is swept by hand weekly. Storm drain water in King County is collected at the regional West Point Treatment Plant for wastewater treatment and eventual water reuse or released to Puget Sound in the case of sewer overflow.

The facility is located approximately 2 miles west of the Duwamish River. No other bodies of water or storage reservoirs are close to the facility. In addition, the facility is not located near any animal grazing, agricultural lands, or soils with high potential for ground-water contamination (King County soils survey map). The facility is not within a 100-year flood plain. (see attached FEMA map)

Facility Description

Total Reclaim occupies 12,000 ft.² in a 33,000 ft.² building. EcoLights Northwest, LLC shares this building with the Total Reclaim Inc. CRT recycling program. The building was built in the mid-1960's. The walls are concrete tilt-up construction and the roof is a wood bow truss frame. The building has 2 dock-high garage doors and 5 grade level doors to accommodate ground loading. There are no floor drains in the entire building. (see facility map addendum)

EcoLights Northwest uses an independent security company, Protection One, for security system installation and monitoring. The system provides 24-hour alarm monitoring with monitors on all doors and windows. The system also provides internal motion sensors and fire detection. The facility has a standard fire suppression sprinkler system.

There are no closed PCB or hazardous waste management units on site.

PCB Storage Capacity and Inventory

CAPACITY: All suspected PCB-bearing materials (ballasts, capacitors, and transformers) are stored in DOT approved 55-gallon drums. Although ballasts and transformers only hold a small percentage of PCB's (approximately 9% by volume where present). Each ballast will be considered 100% PCB's for storage calculation purposes. (i.e. a full 55 gallon drum of ballasts

will be considered to contain 55 gallons of PCB materials, not 5 gallons (55 gallons x 9%) of PCB material).

EcoLights Northwest uses non-porous steel containment berms (as per 40 CFR 761.3 for a non-porous surface of smooth, uncorroded metal) for storage of 55 gallon drums of PCB materials. The berm is designed in such a way that the drums sit above the berm and thus the drums cause no internal displacement. (see Berm Specification addendum).

These berms each hold 4 drums, with a maximum of 10 berms available on-site. All suspected PCB materials are stored in these berms. The PCB storage area is located along the center of the south wall in a 12' x 36' area. The berm area is an unpainted, porous concrete floor. The area is clearly marked, in one-inch high black lettering, as a PCB storage area. The berm area does not contain any drain valves, floor drains, sewer lines, expansion joints, or other openings. (See Facility Drawing)

There are no outside or bulk storage areas of PCB materials.

Berm dimensions: 7" x 47.5" x 47.5"

Capture Volume: 66.75 US Gallons

(see Berm Specification addendum for further description and drawing)

Thus, having 10 of these berms available and using 55-gallon drums for storage EcoLights is able to store up to 40 drums of PCB articles, including ballasts, capacitors, and transformers. This provides 25% of the total internal volume of all PCB articles per 40 CFR 761.65(b)(1)(ii). There are no ramps or other stationary objects, such as pallets, in the PCB storage area that would displace secondary containment volume. Displacement has been factored in when determining the capture volume. (see Berm Specification addendum)

MAXIMUM INVENTORY: To ensure that the maximum capacity is never exceeded the maximum inventory is 36 drums. This affords one berm as available over flow while waiting for collection from a disposal vendor. Once the 36 drums are accumulated all PCB materials are sent to the PCB disposal vendor, Lighting Resources, Inc. of Phoenix, AZ for further processing, metals recycling, and PCB incineration. (see Recovered Product Destination addendum)

Mercury Storage Capacity and Inventory

CAPACITY: Mercury phosphor powder is collected and stored in DOT approved 55-gallon drums. Although mercury accounts for less than 1% of the volume, these calculations assume for capacity and inventory requirements that the drum contains 100% regulated materials.

EcoLights Northwest uses a polyester-membrane containment berm for storage of mercury materials. The area is clearly marked, in one-inch high black lettering, as a hazardous waste storage area. The berm area does not contain any drain valves, floor drains, expansion joints, sewer lines, or other openings. (See Facility Map addendum)

There are no outside or bulk storage areas of mercury materials.

Berm dimensions: 10' x 10' x 4" berm
 = 57,600 cubic inches
 1 ft³ = 1,728 cubic inches
 57,600/1728 = 33.33 ft³
 7.5 gallons = 1 ft³
 33.33 x 7.5 = 249.3 gallons

Displacement: 3.14 x 12² x 4 volume
 = 1809.56 cubic inches
 1,809/1,728 = 1.05 ft.³
 1.05 x 7.5 gal = 7.875 gallons
 7.875 x 12 = 84.5 gallons displaced
 249.3 - 84.5 = 164.8 gallons available

Thus, using 55-gallon drums for storage EcoLights is able to store up to 24 drums of mercury waste, with 12 drums on the ground layer and another 12 stacked on top. This provides over 10% of the total internal volume of all mercury waste as per 40 CFR 264.175 (b)(3) for storage of RCRA waste. There are no ramps or other stationary objects, such as pallets, in the berm that would displace secondary containment volume.

MAXIMUM INVENTORY: To ensure that the maximum capacity is *never* exceeded the maximum inventory is 20 drums. When 20 drums are accumulated, or when the 90 day storage limit has been met, whichever comes first, all mercury waste is sent to EcoLights mercury retort vendor Lighting Resources, Inc. of Greenwood, IN or one of the other approved mercury retort vendors (see Recovered Product Destination addendum)

CRT Storage Capacity and Inventory

CAPACITY: Cathode Ray Tubes (CRT's) collected from the CRT monitors are segregated and stored in 4' x 4' x 4' fiberboard boxes (commonly known as Gaylord boxes). Approximately 50 CRT's can be held in each fiberboard box. The facilities storage capacity is 54 of these fiberboard boxes, each holding 50 CRT's, or approximately 1000 lbs. These will be stored in the CRT Recovery Area. (see Facility addendum)

There is no secondary containment around these fiberboard boxes.

MAXIMUM INVENTORY: Once the 54 fiberboard boxes are full, or approximately 40,000 lbs. of material is collected, they will be immediately sent to a smelter for glass and lead recovery and recycling.

CLOSURE PLAN PROCEDURES AND SPECIFICATIONS

Introduction

PCB Waste

It is the intention of EcoLights Northwest, LLC that the following closure plan meets the requirements of 40 CFR 761.65 and all PCB-contaminated equipment will be removed and disposed of in accordance with 40 CFR 761.60.

The principle hazard associated with PCB lighting ballasts is the potential of leakage of PCBs from the ballast during handling and storage. Ballasts should be carefully handled to prevent them from being crushed or broken.

Suspected PCB ballasts are stored in DOT approved 55 gallon metal drums in a non-porous steel containment berm. PCB ballasts are stored for no longer than 3 months, or until a total of 36 drums of ballasts have been collected, whichever comes first. The only other PCB bearing materials EcoLights Northwest accepts are individual PCB capacitors and PCB transformers. These materials are handled in the same manner as PCB ballasts and will be treated as such throughout this document. They are also included in the count of total drum inventory allowed on site.

The PCBs are located inside the capacitor of the ballast and possibly the potting compound surrounding the capacitor. Lighting ballasts, electrical capacitors, and electrical transformers contain nearly pure PCBs at 900,000 ppm or greater concentrations. Each ballast or capacitor contains approximately one ounce of PCBs. Transformer PCB quantities vary greatly depending on the size and date of manufacture of the transformer.

Any leaking ballasts, capacitors, or transformers are placed in a plastic bag in the PCB drum. All clothing or absorbent material that has been exposed to leakage from a PCB ballast is also placed in a PCB drum and sent off site for incineration.

EcoLights Northwest does not open or otherwise process PCB ballasts, capacitors, or transformers. The units are inspected for No-PCB stickers, separated into PCB and No-PCB drums, and stored for eventual recycling and incineration. Those units not marked, or that are unreadable, are assumed to contain PCBs and are treated as such. There are no other PCB operations at the facility.

Full drums are sent to a permitted PCB-materials recycling and disposal facility via an independent hazardous waste carrier. At the receiving facility ballasts are separated into their constituent scrap metal and PCB capacitors. The scrap metal is recycled with scrap metal recyclers while the PCB bearing capacitors are sent to an EPA approved PCB incinerator, Safety-Kleen Environmental Services of Deer Park, TX. (see Recovered Product Destination addendum). No PCB laden material collected by EcoLights Northwest is ever landfilled.

Mercury Waste

EcoLights Northwest, LLC also generates mercury bearing phosphor powder through the recycling of fluorescent light bulbs. It is collected in 55-gallon DOT drums and stored in a separate berm area. The powder is sent to either Lighting Resources, Bethlehem Apparatus, or Mercury Waste Solutions (see Recovered Product Destination addendum). The powder is sent to these facilities for retort, a process that uses high-temperatures to evaporate the mercury, which is distilled and made available for resale and reuse.

EcoLights Northwest also accepts mercury thermostats for recycling under the Universal Waste Rules. These thermostats are collected in a 55-gallon DOT drum and stored in a one-drum secondary containment berm. It is then sent off for recovery and retort. No processing of the waste occurs.

Other Wastes

No other hazardous waste materials are generated or stored by EcoLights Northwest. The only other waste generated are aluminum, glass, and plastic which are considered solid waste or recyclable materials.

Total Reclaim also generates waste from it's CRT operations on-site. These wastes are also considered either solid waste or recyclable materials as described previously.

Emergency Contacts

The following numbers are to be used in the case of an accidental release of PCB materials during the closure process.

National Response Center: 800-424-8802
Contact immediately if a waste discharge threatens human health or the environment.

State Dept. of Ecology – NW Region: 425-649-7000
For notification purposes only in the case of a large spill (more than 1 lb. liquid PCB).
Do not use as an emergency number.

All other Emergencies: 911

Disposal of Waste Inventory

Disposal of PCB Inventory

The maximum inventory of PCB wastes is 36 drums. This would be the largest quantity possible on site at the time of closure.

Disposal of all PCB Inventory at the time of facility closure will be carried out within 90 days from final receipt of PCB wastes in accordance with requirements in 40 CFR 761.60. Throughout the life of EcoLights Northwest's PCB storage facility all PCB wastes will be tracked via manifest for both incoming and outgoing wastes and will comply with all other waste generator requirements. All manifests, and information contained within, are tracked via computer software. All manifests are kept on file indefinitely.

At the time of closure a maximum of 36 drums of PCB wastes will be sent off site for disposal. No treatment will be performed on the wastes prior to shipment off site. The PCB wastes will be sent to an EPA approved PCB disposal facility for metals recycling and PCB incineration. The TSCA approved facility for disposal is Lighting Resources Inc. In the case that Lighting Resources is no longer able to accept this waste, an alternative facility will be used. The alternative facility is either Full Circle, Inc. or Trans-Cycle Industries. (see Recovered Product Destination addendum)

Disposal of Mercury Waste Inventory

The maximum inventory of mercury wastes is 20 drums of mercury powder and one drum of mercury thermostats. This would be the largest quantity possible on site at the time of closure.

EcoLights Northwest tracks all shipments of mercury-phosphor powder via manifest and will comply with all other waste generator requirements. All manifests, and information contained within, are tracked via computer software. All manifests are kept on file indefinitely.

At the time of closure a maximum of 21 drums of mercury wastes will be sent off site for disposal. No treatment will be performed on the wastes prior to shipment off site. The mercury wastes will be sent to an EPA approved mercury retort facility for metals extraction. The TSCA approved facility for disposal is Lighting Resources of Greenwood, IN. In the case that Lighting Resources is no longer able to accept this waste, an alternative facility will be used. The alternative facility is either Mercury Waste Solutions or Bethlehem Apparatus Co. (see Recovered Product Destination addendum)

Disposal of CRT Waste

The maximum inventory of CRT waste is 54 fiberboard boxes. This would be the largest quantity possible on site at the time of closure.

At the time of closure the CRT's will be shipped off site for recovery and recycling. The approved smelter for lead and glass is Envirocycle of Hallstead, PA. In the case that Envirocycle is no longer able to accept this product, an alternative facility will be used. The alternative facility is The Doe Run Company. (see Recovered Product Destination addendum).

CLOSURE PLAN SAMPLING, DECONTAMINATION, AND COMPLIANCE WITH THE SPILL CLEANUP POLICY

Initial Assessment

The previous tenant of the building was a drinking-water bottling, storage, and distribution plant, with no repair or maintenance activity on the site.

Sampling and Results

Before tenancy EcoLights Northwest hired Professional Service Industries (PSI), a professional engineering firm, to do two rounds of interior and exterior building and surrounding asphalt parking area samples to determine the current levels of PCBs, mercury, and lead in the facility and surrounding area.

A total of 12 samples were taken for PCB's, with 20 samples each taken for mercury and lead. PCB's were tested using USEPA Method 8082. The highest level of PCB's were found at .2 ppm from a sample of dirt outside of the building adjacent to the parking lot. Results for all other PCB samples were less than .1 ppm. These concentrations do not exceed the MTCA

Method A cleanup levels for PCBs. (For a summary of all sampling and analysis activities that were performed and the results of these activities see Initial Assessment addendum).

Mercury was tested using USEPA Method 7471. The highest level of mercury was found at .85 ppm from an asphalt sample along the north wall of the building. None of the mercury concentrations exceeded the MTCA Method A clean-up level for mercury.

Lead was tested using USEPA Method 6010. The highest level of lead found was 190 ppm collected from dirt and debris on the roof of the building. All other concentrations were at 60 ppm or less. These concentrations do not exceed the MTCA Method A clean-up level of 250 ppm for lead.

Worker Training

Workers conducting sampling and decontamination activities will be required to have completed a minimum of 40 hours of HAZWOPER training and be supervised by a person experienced and knowledgeable in PCB decontamination projects.

Worker protection

Workers conducting sampling and decontamination activities will wear appropriate personal protective equipment to comply with Level C personal protection that includes, at a minimum;

- a ½-face negative pressure respirator equipped with HEPA cartridges,
- disposable hooded coveralls impervious to PCBs, water, and diesel,
- rubber boots and disposable over booties,
- inner and outer gloves impervious to PCBs, water, and diesel
- safety glasses

Workers conducting sampling and decontamination activities must be covered under an employer provided respiratory protection plan as specified in 29 CFR 1910.134.

Workers conducting sampling and decontamination activities must participate in an employer provided medical monitoring program that includes medical evaluation and approval for respirator use as well as baseline and periodic monitoring for health effects associated with PCB exposure.

Site Access

Access to the site will be limited to properly trained Total Reclaim and EcoLights NW personnel and third-party consultants and personnel. All third party personnel are required to follow the above safety procedures and be knowledgeable of the inherent risks associated with PCB storage facility closure.

Numerical Standards: PCB closure levels

As a Commercial Storer of PCB ballasts, capacitors, and transformers EcoLights Northwest routinely stores for shipment these materials in 55 gallon drums in a designated storage area. For closure plan purposes this area is designated as a non-restricted access area. The surfaces of this area, the storage area walls to six feet, the loading dock, and all movable equipment including the steel berm and the fork lift mounted drum clamp, are the only areas and equipment subject to decontamination for PCBs. These surfaces will be decontaminated to the following levels:

1. Storage area concrete floors – Porous solid surface. (40 CFR 761.125(c)(4)).
2. Storage area sheet rock walls – Porous solid surface (40 CFR 761.125(c)(4)).
 - Wall and floor surfaces will be decontaminated to less than 10 $\mu\text{g}/100 \text{ cm}^2$ as measured by a standard wipe test. (40 CFR 761.79 (b)(4))
3. Movable equipment used in PCB storage area – Non-porous solid surface. (40 CFR 761.79 (b)(3)(i)(A)).
 - Equipment will be decontaminated to less than 10 $\mu\text{g}/100 \text{ cm}^2$ as measured by a standard wipe test. (40 CFR 761.79 (b)(4))

Pre-Cleanup Sampling

Prior to beginning the cleanup process an initial inspection of the facility will be performed by a third-party contractor as per 40 CFR 761.125(c)(iii). The initial inspection will include a visual inspection of the storage area, all movable equipment used in the storage area, and the loading dock. This process will be documented via photographs and written accounts by the third-party contractor.

All areas that show signs of PCB contamination will be sampled, as well as randomly selected areas that show no obvious sign of PCB contamination. This will include the storage area, all movable equipment, and the loading dock.

The samples collected will be submitted to an independent laboratory for analysis. The samples will be analyzed using USEPA Method 8082.

Decontamination Procedures

Specific decontamination procedures have been established for equipment, structures and other materials which may have been impacted by PCBs. This discussion of decontamination shall specify which areas and materials are subject to 40 CFR 761.79.

The following decontamination procedures assume a worst case cleanup scenario conducted by a third-party contractor.

Specific equipment, structures and other materials that will require decontamination for PCBs will be identified during the pre-cleanup visual inspection. If no visual contamination is evident, cleanup boundaries will be determined by sample collection and analysis. Because ballasts and

other PCB containing equipment are not opened, processed or dismantled on site, the visual and sampling inspections are anticipated to identify only limited PCB contamination.

Equipment, structures and other materials that are anticipated to require PCB decontamination at closure include:

- The sheet rock wall behind the PCB storage area, including the walls extending six feet past each side of the storage area, to a height of six feet, totaling approximately 288 square feet;
- The concrete floor below the PCB storage area, including an area of floor extending six feet past the front and sides of the storage area, totaling approximately 864 square feet;
- Miscellaneous areas of the concrete floor, such as the loading dock, totaling approximately 300 square feet;

Miscellaneous areas of asphalt pavement and underlying soil adjacent to the loading dock doors, totaling approximately 150 square feet;

- Ten steel floor pans, four-feet long, four-feet wide and six-inches high, used as secondary containment for the PCB storage drums;
- One forklift-mounted drum clamp.

Non-porous surfaces will be cleaned to a concentration less than or equal to ten micrograms per cubic centimeter ($\mu\text{g}/100\text{cm}^2$) as required in 40 CFR 761.79 (b)(3)(i)(A). Non-porous surfaces include the forklift-mounted drum clamp and the steel containment pans. Non-porous surfaces will be decontaminated using a solvent wash method. Verification of cleanup levels will be accomplished through collection and analysis of wipe samples as specified in 40 CFR Subpart P.

Porous surfaces will be cleaned to a level of <1 ppm or below, as required in 761.61(a)(4)(i)(A). Porous surfaces include concrete floors, sheet rock walls, and asphalt pavement. Contaminated concrete will be removed using a HEPA equipped grinder or floor shaver. Contaminated asphalt and underlying soil will be removed to an approximate depth of ten inches with an excavator or backhoe. Contaminated sheet rock walls will be dismantled and removed. Verification of cleanup levels will be accomplished through collection and analysis of core samples as specified in 40 CFR Subpart O.

Prior to starting decontamination procedures appropriate exclusion zones, support zones, worker decontamination areas and clean areas will be established and clearly demarcated. Access to and from the exclusion zones will be configured to limit public access to the work area and direct personnel through the decontamination area.

Non-Porous Surfaces

The secondary containment pans and forklift-mounted drum clamp will be decontaminated using a solvent wash method. The solvent wash method proposed herein is intended to minimize equipment and supplies needed to complete the decontamination process and can be easily and quickly repeated.

Items to be decontaminated will be placed on an area of clean 6-mil plastic sheeting, approximately 20-feet x 20-feet, in order to protect the floor from contamination and to contain and collect residual solvent. The outer edges of the plastic will be placed over a frame of 2-inch x 4-inch boards, creating a berm to prevent residual solvent from running off of the plastic. The plastic will be repaired or replaced as necessary to prevent cross contamination.

Diesel fuel will be used as the decontamination solvent. Equipment will be swabbed with an absorbent pad lightly saturated with diesel fuel, then scrubbed using hand-held scrub brushes. The equipment will then be wiped clean using clean absorbent pads. After the initial swab, scrub and wipe, the process will be repeated a second time using clean diesel fuel, scrub brushes and absorbent pads.

After decontamination is completed, the protective plastic sheeting will be wiped with absorbent pads to collect any residual solvent. Non-liquid cleaning materials including rags, brushes, absorbent pads, gloves, booties and other non-liquid PPE will be gathered and contained for disposal separate from liquid decontamination waste.

If subsequent wipe sample analysis indicates that non-porous items still contain PCB concentrations above 10 $\mu\text{g}/100\text{cm}^2$ the cleaning process will be repeated.

Porous Surfaces

Contaminated concrete surfaces will be removed using a HEPA equipped grinder or floor shaver. Contaminated asphalt and underlying soil will be removed to an approximate depth of ten inches with an excavator or backhoe. Contaminated sheet rock walls will be dismantled and removed.

CONCRETE

Cost estimates and production rates for the concrete floor shaver are based on information obtained from Innovative Technology Summary Reports prepared for the U.S. Department of Energy, Office of Environmental Management, Office of Science and Technology. The concrete floor shaver was demonstrated as innovative technology at the U.S. Department of Energy Hanford Site and is considered more efficient and cost effective than pneumatic scabblers and scalers traditionally used for concrete removal. The report is available on-line at <http://em-50.em.doe.gov>.

Prior to starting decontamination procedures, the work areas will be cleared of all movable items and loose debris and the floor vacuumed with a HEPA vacuum.

Concrete floors will be decontaminated by removing approximately 1/16-inch – 1/8-inch of concrete using a concrete floor shaver. The concrete floor shaver is an electrically driven, self-propelled concrete and coating removal machine. The machine utilizes a 10-inch wide diamond impregnated shaving drum powered by an electric motor and contains a vacuum port for dust extraction. The production rate for the floor shaver is approximately 128 sf/hr. A HEPA vacuum will be attached to the floor shaver to collect dust and debris generated during the shaving procedure.

Floor shaving will begin at one corner of the work area and proceed systematically across the work area. The entire work area will be vacuumed with a HEPA equipped vacuum after concrete removal is completed. Dust and debris will be collected in open-top 55-gallon drums for transportation and disposal off site.

ASPHALT

Contaminated asphalt and underlying soil will be removed to an approximate depth of ten inches with an excavator or backhoe. The excavated material will be placed in a dump truck or roll-off box lined with 6-mil plastic sheeting for transportation and disposal off site.

SHEET ROCK WALLS

Contaminated sheet rock walls will be completely removed using hand tools. The material will be placed in approximately 6 – 55 gallon drums lined with 6-mil plastic for transportation and disposal off-site.

If subsequent core sample analysis indicates that porous surfaces still contain PCB levels above 1 ppm, additional material will be removed as necessary using the above procedures.

Worker Training

Workers conducting decontamination activities will be required to have completed a minimum of 40 hours of HAZWOPER training and be supervised by a person experienced and knowledgeable in PCB decontamination projects.

Worker protection

Workers conducting decontamination activities will wear appropriate personal protective equipment to comply with Level C personal protection that includes, at a minimum;

- a ½-face negative pressure respirator equipped with HEPA cartridges,
- disposable hooded coveralls
- rubber boots and disposable over booties,
- inner and outer gloves
- safety glasses
- face shields as appropriate
- hearing protection as appropriate

Workers conducting decontamination activities where respirator use is required must be covered under an employer provided respiratory protection plan as specified in 29 CFR 1910.134.

Workers conducting decontamination activities must participate in an employer provided medical monitoring program that includes medical evaluation and approval for respirator use as well as baseline and periodic monitoring for health effects associated with PCB exposure.

Decontamination Waste Generation

The following waste generation estimate assumes that the concrete floors will need to be cleaned twice. Based on information in the Innovative Technology reports for the concrete floor grinder, approximately 1 full drum of concrete debris will be generated from each cleaning of the PCB storage area floors. It is estimated that for each 48 ft.² of sheet rock 1 full drum of sheet rock debris will be generated. Decontamination wastes will be placed in 55-gallon drums and disposed of at an off-site TSCA approved hazardous waste facility as PCB waste.

PPE, rags, brushes and other non-liquid waste generated during the decontamination process will be collected in plastic bags and disposed of at a municipal landfill as allowed in 40 CFR 761.61(a)(5)(v)(a).

Estimated Waste Quantities:

Concrete debris from floor decontamination	2 drums
Sheet rock debris from wall decontamination	6 drums
Water used in personnel decon station	1 drum
Miscellaneous plastic sheeting & verification sampling materials	1 drum
HEPA vacuum, hose and attachments	1 drum
PCB contaminated diesel fuel	<u>1 drum</u>
Total	12 drums
Asphalt and soil – 150 sf x 10-inch depth	6 cubic yards
Worker PPE, scrub brushes, rags and pads	2 cubic yards

Post-Cleanup Sampling

This is a description of post-cleanup sampling areas to determine that PCB impact has been reduced to appropriate cleanup levels in the PCB storage area.

Sampling of concrete floors, sheet rock walls, and soil below the asphalt in the loading dock area, the secondary containment pans and the forklift-mounted drum clamp will be conducted after cleanup to verify that appropriate cleanup levels have been achieved.

POROUS SURFACES

Determination of the number of samples to collect and sample collection locations for porous surfaces, including concrete floors, sheet rock walls, and soil was determined as specified in 40 CFR 761 Subpart O. A north-south oriented grid system, 1.5 meters square, overlaying the areas to be sampled, will be used to determine specific sample locations. Core samples will be collected at each grid intersection lying within the cleanup area. Samples will be composited for analysis as specified in 40 CFR 761.289(b). This method of sample collection and analysis combines several samples into a single chemical analysis, thus substantially reducing the number of analyses and the associated cost. Composite samples will be composed of a maximum of eight individual samples following the collection methodology provided in 40 CFR 761.283.

<u>Area</u>	<u>Number of Samples Collected</u>	<u># of Composite Samples to be Analyzed</u>
PCB storage area		
Concrete floors, 24' x 48', with a total area of 864 sf	40	5
Sheet rock walls, 6' x 48', with a total area of 288 sf	8	1
Miscellaneous concrete areas		
300 square feet total - assuming four areas of 75 sf each, with 4 samples from each area	16	4
Soil below asphalt at the loading dock 150 square feet total - assuming three areas of 50 sf each, with 4 samples from each area	16	4
Core Sample Total	80	14

NON-POROUS SURFACES

Collection and analysis of wipe samples from the secondary containment pans and forklift-mounted drum clamp will be conducted to verify that appropriate cleanup levels have been achieved. The number and location of samples was estimated based on the procedures for sampling non-porous surfaces specified in 40 CFR 761 Subpart P. Wipe samples will be collected from three separate 10-centimeter by 10-centimeter areas on the underside and exterior sides of each containment pan. Three additional samples will be collected from the interior area of each pan, following the same procedures. Each group of three wipe samples will be composited for analysis. One wipe sample will be collected from the entire surface area of the forklift-mounted drum clamp and analyzed as a discrete sample.

Sample collection areas, the estimated number of samples to be collected and the estimated number of composite samples to be analyzed are listed in the following table:

<u>Area</u>	<u>Number of Samples Collected</u>	<u># of Composite Samples to be Analyzed</u>
Secondary containment pans 10 pans with 6 wipe samples each	60	20
The entire surface of the forklift drum clamp	<u>1</u>	<u>1</u>
Wipe Sample Total	61	21

CLOSURE SCHEDULE

Estimated Facility Closure Date: **January 1, 2008**

The following procedures will be followed upon the closure of said facility to ensure that no unreasonable risk to human health or the environment remains after the closure of the facility. All closure procedures will be completed within 180 days of closing the facility. The certification will be signed by the owner of EcoLights Northwest and an independent registered professional engineer.

1. EcoLights Northwest will notify the Environmental Protection Agency, Region 10, and the Washington State Department of Ecology of its intent to close the facility 60 days prior to the closure start date.
2. Closure will begin no later than 30 days following final receipt of PCB materials.
3. All remaining PCB ballasts will be sent off site for recycling and incineration within 90 day of final receipt of materials.
4. Non hazardous wastes (boxes, garbage, etc.) will be segregated for proper recycling and disposal and sent to the appropriate facility.
5. The facility will be cleaned in accordance with approved closure procedures (see previously discussed Decontamination Procedures).
6. After the facility has been cleaned, samples from the facility and asphalt will be collected and analyzed for residual PCB's.
7. If facility samples show contamination, the building will be re-cleaned and the cleaning materials will be tested to determine if they are hazardous waste. An additional round of sampling will be performed to determine if PCB residue remains. This process will be completed within the 180 day period.
8. If the independent lab finds soil or asphalt contamination all contaminated soils and asphalt will be disposed of in accordance with 40 CFR 761.60. This process will be completed within the 180 day period.
9. Post-closure will be verified by a registered, professional engineer.
10. Closure certification will be sent to the EPA, Region 10 within 60 days after closure has been completed with all necessary attached documentation.

Closure Process

The closure process will follow strict worker protection measures. All employees involved in the closure process will be required to follow the prescribed worker training and protection protocols.

This closure process is designed to take the facility out of service and minimize the need for further maintenance. The closure procedures will protect human health and the environment by removing unreasonable levels of waste residue, thereby eliminating the possibility of post-closure releases of any potentially hazardous materials.

The closure process will include securing the facility to limit access. Security will include limiting entrance to the building via locked doors and windows and securing the yard via perimeter fences and gates. In addition, third-party security monitoring will continue until after the facility has been closed and the closure has been approved by the U.S. EPA.

FINANCIAL RESPONSIBILITY DEMONSTRATIONS

Financial Assurance

Financial responsibility requirements for closure will be secured using insurance whereby the insurer agrees to fund the closure of the facility at the direction of the EPA. The insurance endorsement to the pollution liability policy is EILP 69 Closure and/or Post Closure Endorsement and EILP 70 Closure and/or Post-Closure Scheduled Site Endorsement. (See Insurance Endorsement addendum)

Annually, the Closure Cost Estimate will be adjusted for inflation using the Implicit Price Deflator for the GNP. If the total estimate is ever above the insured amount, the insurance will be increased to cover current prices.

Financial Assurance Mechanism:	Insurance
Amount of financial assurance:	\$50,000
Issuer of mechanism:	Evanston Insurance Company
Issuer's address:	Shand Morahan Plaza Evanston, IL 60201
Insurance Agent:	Tim McLean Olympic Insurance Agencies
Insurance Agency address and phone:	PO Box 52840 Kenmore, WA 98028 425-486-4334

Effective date of mechanism: to be determined

Expiration date of mechanism: to be determined

CLOSURE COST ESTIMATES

Estimated Cost Table Year 2000

This cost estimate assumes that decontamination of the concrete floors, secondary containment pans and forklift-mounted drum clamp will be completed twice, with verification sampling conducted after each cleaning. This estimate assumes that only one round of sheet rock, asphalt and soil sampling will be required.

The cost estimate assumes a rate for cleanup workers and sampling technicians of \$500 per man day (\$62.50 per hour).

This cost estimate is based on currently available equipment purchase and rental costs, disposal costs and discussions with Global Environmental Services Group, LLC, an environmental remediation firm experienced in PCB remediation projects. Additional disposal and equipment costs were based on information supplied from Lighting Resources, Inc. and Onyx Environmental, Inc.

Cost information for the floor shaver is derived from *Innovative Technology Summary Reports* prepared for the U.S. Department of Energy, Office of Environmental Management, Office of Science and Technology. The concrete floor shaver was demonstrated as innovative technology at the U.S. Department of Energy Hanford Site and is considered more efficient and cost effective than pneumatic scabblers and scalers traditionally used for concrete removal. The report is available on-line at <http://em-50.em.doe.gov>.

A contractor mobilization and demobilization fee is included which covers the cost of gathering, transporting, setting up and subsequently removing equipment from the job site. This fee also covers the cost of miscellaneous consumable items such as spray glue, tape, trash bags and scrub brushes.

Decontamination

Remediation contractor mobilization / demobilization fee
2 @ \$600/each

\$1,200

Labor

Mobilize/demobilize

Includes equipment staging, decon setup & regulated area setup
6 man days @ \$500/day

\$3,000

Floor pan cleaning

6 man days @ \$500/day

\$3,000

Forklift-mounted drum clamp cleaning

½ man day @ \$500/day

\$250

Sheet rock removal (288 sf) 1 man days @ \$500/day	\$500
Concrete removal with floor shaver (1,164 sf) 3 man days @ \$500/day	\$1,500
Environmental technician during asphalt / soil removal ½ man day @ \$500/day	\$250
Asphalt / soil removal – (150 sf to 10-inch depth) labor and equipment – includes operator, backhoe, dump truck, equipment mob/demob costs 1 day @ \$1,800/day	\$1,800
Equipment	
PPE – includes costs to purchase and transport PPE to the job site 18 man days @ \$97/man day	\$1,746
6-mil plastic sheeting 2 rolls @ \$65/roll	\$130
HEPA vacuum 6 @ \$45/day	\$270
Diamond grinding wheel 1 @ \$205/each	\$205
Floor shaver rental 4 @ \$175/day	\$700
Diesel fuel 15 gallons @ \$2/gallon	\$30
Absorbent pads 2 bales @ \$105/bale	\$210
<u>Decontamination Total</u>	<u>\$14,791</u>

SAMPLING

Cleanup verification sample collection, 1st round, includes core
and wipe sample collection

Environmental Sampling Technicians 4 man days @ \$500/day	\$2,000
determine sampling areas	½ man day
collect 60 wipe samples	1 man day
collect 80 concrete and sheet rock core samples	2 man days
document, preserve and ship samples to lab	½ man day
Round 1 TOTAL	4 man days

Core drilling machine and bits 2 days @ \$75/day	\$150
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Sample analysis, 1 st round	
21 composite wipe samples @ \$32/each	\$672
14 composite core samples @ \$32/each	\$448
Sample shipping @ \$125/each	\$125

Cleanup verification sample collection, 2nd round, includes core and wipe sample collection

Environmental Sampling Technicians	
4 man days @ \$500/day	\$2,000
determine sampling areas	½ man day
collect 60 wipe samples	1 man day
collect 80 concrete core samples	2 man days
document, preserve and ship samples to lab	½ man day
Round 2 TOTAL	4 man days

Core drilling machine and bits	
2 days @ \$75/day	\$150

Sample analysis, 2nd round	
21 composite wipe samples @ \$32/each	\$672
14 composite core samples @ \$32/each	\$448
Sample shipping @ \$125/each	\$125

<u>Sampling Total</u>	\$6,790
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DISPOSAL

Purchase drums for debris disposal	
12 drums @ \$45/each	\$540
Incineration of PCB ballasts/capacitors/transformers	\$10,400
40 drums of 650 lbs. @.40/lb	
Incineration as PCB waste generated from closure/decon activities	
4 drums @ \$675/each	\$2,700
Transportation	
4 drums @ \$200/each	\$800
Concrete disposal	
2 drums (.75 cubic yards) @ \$1,000/cy	\$750
Asphalt and soil disposal	
6 cubic yards @ \$1,000/cy	\$6,000
Sheet rock disposal	\$2,500
6 drums (2.5 cubic yards) @ \$1,000/cy	
Transportation to landfill for debris	
1 trip @ \$800/trip	\$800
Disposal of PPE and cleaning supplies at municipal landfill	
2 cubic yards @ \$45/cy	\$90

Transportation to municipal landfill
1 trip @ \$150/trip

\$150

Disposal Total **\$24,730**

Year 2000 Estimated Total **\$46,311.00**

Estimated Cost Year 2008

The year 2008 cost estimate was developed by calculating an increase to the year 2000 cost estimate, based on an average annual rate of inflation of 2.6%. Information on the average annual inflation rate was obtained from the Budget of the United States Government Fiscal Year 2001, prepared by the Office of Management and Budget, Economic and Accounting Analysis Department.

Year 2008 Estimated Total **\$56,867.36**